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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/332,420	06/14/1999	DAVID EDGAR HAUBER	AD-2	2916

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 08/25/2003

23

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

09/332,420

Applicant(s)

HAUBER, DAVID EDGAR

Examiner

Alicia Chevalier

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

RESPONSE TO AMENDMENT

REJECTIONS REPEATED

1. The 35 U.S.C. §112, first paragraph, rejection of claims 1-10 is repeated for reasons previously of record in paper #19, pages 3-4, paragraph #6.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case claims 1 and 7 now recite the limitations “the subsequent thermal bonding of applied fibers *only* adhering the applied fibers to the outer wall surface of the underlying pipe length without utilizing further adherence agents” and “while *not* further melting said underlying pipe length to avoid introducing thermally induced residual stress therein.” The specification does not disclose that the fibers are solely adhered to the outer wall surface, just that they are primarily adhered to the outer wall surface, nor that the underlying pipe is not further melted.

Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) (“[the] specification, having described the whole, necessarily described the part remaining.”). See also *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff’d mem.*, 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement.

Art Unit: 1772

2. The 35 U.S.C. §102 rejection of claims 1-6 as anticipated by Gibson et al. (H1261) is repeated for reasons previously of record in paper #19, pages 4-6, paragraph #7.

Gibson discloses filament wound parts or structures for containers such as tanks, pressure vessels, cylinders and bottles, and conduits such as piping and tubing, which may be used for pressurized or compressed gases and cryogenic gases (col. 1, lines 11-15). The filament wound composite comprising a melt-processable thermoplastic matrix (thermoplastic organic member) with reinforcing or structural wound fibers (col. 2, lines 37-41). The reinforcing fibers are high strength, non-thermoplastic, reinforcing or structural fibers may be glass such as E glass and S glass, aramid, carbon, and boron (col. 3, lines 17-20).

Example 1 discloses that the thermoplastic matrix is formed around a cylindrical mandrel and then solidified. Reinforcing fibers are then wound around the cylindrical thermoplastic matrix in multiple layers at a wind angle or 65° or the hoop direction. After each layer is of reinforcing fibers is wound around the thermoplastic matrix hot air is direct onto the filament at the point of mandrel contact so that the thermoplastic material is in a thixotropic molten state, and the hand-held press roll is used to apply a pressure of about ten pounds at the impingement point.

The filament wound composite is formed of a structural fiber and a melt-processable, thermoplastic fiber commingled into a tow, is wound onto a mandrel to form a multi-ply composite. During the filament winding thermoplastic material wound onto the mandrel, is heated to a thixotropic molten state. (Thermal bonding of the applied fibers only adhering the applied fibers to the outer wall surface of the underlying pipe length without utilizing further adherence agents.) Beneficially, to provide uniformity of melting of the thermoplastic material

Art Unit: 1772

and avoid thermally induced strain in the consolidated structure (avoiding introducing thermally induced residual stress therein), heat is applied to an internal surface of the wound filament, and is applied to an internal surface of the wound filament, and is applied from a second heat source to an external surface of the wound filament. See column 3, lines 41-52.

The phrase “for maximum effectiveness in withstanding the applied internal stress when the reinforced pipe length is subsequently put into service” is an intended use. It has been held that a recitation with respect to the manner in which a claimed product is intended to be employed does not differentiate the claimed product from a prior art product satisfying the claimed structural limitations.

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitations the continuous fibers having

Art Unit: 1772

been continuously applied in an unbonded condition and while not further melting said underlying pipe length are methods of production and therefore does not determine the patentability of the product itself.

The new limitation “already formed pipe member” is a method of production and therefore does not determine the patentability of the product itself.

3. The 35 U.S.C. §103 rejection of claims 7-10 over by Gibson et al. (H1261) is repeated for reasons previously of record in paper #19, page 6, paragraph #8.

Gibson discloses all the limitation of the instant claimed invention except for the a plurality of reinforced pipe lengths joined together at the ends. It would have been obvious to one of ordinary skill in the art at the time of the invention to make short pipes to be connected end to end later for easy storage and transportation of the pipe before use.

ANSWERS TO APPLICANT'S ARGUMENTS

4. Applicant's arguments filed in paper #22 regarding the 35 U.S.C. §102 and §103 rejections of Gibson et al. (H1261) of record have been carefully considered but are deemed unpersuasive.

Applicant argues that Gibson neither discloses nor obviously suggests any reinforcement of an already existing thermoplastic storage vessel with continuous fiber being wrapped about the outer vessel surface. Applicant's arguments regarding the Gibson reference are merely the differences between the two processes to end up with similar products. As stated in the previous rejections, the method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be

Art Unit: 1772

either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

5. Applicant's arguments filed in paper #22 regarding the 35 U.S.C. §112, first paragraph, rejection of record have been carefully considered but are deemed unpersuasive.

Applicant argues that basis for the limitation "the subsequent thermal bonding of applied fibers *only* adhering the applied fibers to the outer wall surface of the underlying pipe length without utilizing further adherence agents" can be found on page 16, lines 23-30. Page 16, lines 23-30 recites "[p]assage of the pipe member in the same linear direction at constant speed through the length of said heated chamber in the present apparatus embodiment causes thermal bonding of all wraps on the pipe circumference to become secure to the underlying outer pipe surface and with the individual fiber wraps retaining the applied spatial direction." This passage does not give basis for the fibers *only* adhering the applied fibers to the outer wall surface of the underlying pipe length without utilizing further adherence agents. This passage does provide basis for fibers being bonded to the outer wall surface, but is silent about whether other fibers are bonded other places.

Applicant argues that basis for the limitation "while *not* further melting said underlying pipe length to avoid introducing thermally induced residual stress therein" is deemed inherently disclosed from inspection of the applicant's drawings and specification. The Examiner does not

Art Unit: 1772

see any support in the specification that this limitation is inherently disclosed. The specification is completely silent about whether the rest of the outer vessel is melted or not.

6. Applicant's declaration filed in paper #21 of record has been carefully considered but is deemed unpersuasive.

The declaration states the method disclosed in the application "successfully enables the vessel itself to retain its shape, physical dimensions and structural integrity through the entire process ...". While some of the statements in point #2 by Dr Ibrahim are found persuasive, his comments regarding the vessels structural parts are neither commensurate in scope with the claims nor supported by the specification. Furthermore, there is no comparison of the prior art with the instant claimed invention to show that the instant claimed invention has superior properties not achieved in the prior.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1772

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139.


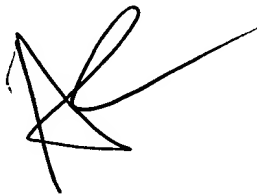
The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9306. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

8/19/03



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

8/19/03